

Consumer Price Index (CPI) and Harmonised Index of Consumer Prices (HICP)

Reference Metadata in Euro SDMX Metadata Structure

(ESMS)

INSTAT

Reference Metadata

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2.3. Metadata last update	28.02.2017
3. Statistical presentation	
3.1. Data description	<p>Consumer Price Index (CPI) is defined as the measure of the average change of prices of a fixed basket of goods and services, which is purchased by households and which aims to satisfy the households' needs. This index is the official index to measure inflation in Albania.</p> <p>Harmonised Index of Consumer Prices (HICP) comprises all products and services purchased in monetary transactions by households within the territory of a country; those by both resident and non-resident households. HICPs cover the prices paid for goods and services in monetary transactions. HICP is the bases for comparative measurement of inflation in European countries and as official inflation of European Central Bank with aim of stability of price in Monetary and Economic Union.</p>
3.2. Classification system	<p>The CPIs and HICPs are calculated according to Classification Of Individual Consumption by Purpose (COICOP). Main COICOP groups of expenditures are:</p> <ol style="list-style-type: none"> 01. Food and non-alcoholic beverages 02. Alcoholic beverages and tobacco 03. Clothing and footwear 04. Housing, water, electricity, gas and other fuels 05. Furnishings, Household equipment and routine maintenance of the house 06. Health 07. Transport 08. Communication 09. Recreation and culture

	<p>10. Education 11. Restaurants and Hotels 12. Other goods and services</p>
3.3. Sector coverage	<p>CPI covers the expenditure of goods and services acquired by households in Albania. HICP covers the expenditure of goods and services acquired by resident and non-resident households in the territory of Albania.</p>
3.4. Statistical concepts and definitions	<p>The basket includes goods and services selected to measure relative changes of the price. Price refers to the actual price that consumers pay for goods and services including taxes and subventions. Base prices are the reference prices to calculate the index. Relative price is the ratio of the price of good and service in current period to prices in December of the previous year. A household may consist of either - one person living alone, or - a group of persons who may or may not share relations of blood, marriage, affection and so on, but who live together and share a common or partially common economy. CPI/HICP measure price change in a representative basket of goods and services typically consumed in Albania and are calculated according to a harmonised methodology and sets of regulations. CPI and HICP are Laspyare indices.</p> <ul style="list-style-type: none"> • Monthly data: <ul style="list-style-type: none"> ○ Indices 2015=100, ○ Annual rates of change, ○ Monthly rates of change, ○ 12-month average rate of change. • Annual data: <ul style="list-style-type: none"> ○ Average index and rate of change, ○ Item weights in 4-digit levels.
3.5. Statistical unit	<p>Each published index or rate of change refers to the “final household monetary consumption” within the economic territory of Albania. Each published index or rate of change refers to the “final monetary consumption expenditure” within the economic territory of Albania. The statistical unit is the household who makes consumption expenses in Albania.</p>
3.6. Statistical population	<p>The target statistical population is the final resident household monetary consumption within the economic territory of Albania. CPI comprises all products and services purchased in monetary transactions by private households within or out the territory of a country; by resident households. The CPI excludes interest and credit charges, considering them as financing costs rather than consumption expenditure. The target statistical population is the household (foreign or resident) final monetary consumption expenditure (HFMCE) within the economic territories of the countries compiling the HICP. This definition is based in the National Account concepts in the European System of Accounts (ESA 2010). HICP comprise all products and services purchased in monetary transactions by households within the territory of a country; those by both resident and non-resident households, and Albanian and non-Albanian. HICPs cover the prices paid for goods and services in monetary transactions. The prices measured are</p>

	those actually faced by consumers. The HICPs exclude interest and credit charges, considering them as financing costs rather than consumption expenditure.
3.7. Reference area	Albania has 12 prefectures and for CPI and HICP calculations 11 prefectures are used and Kukës prefecture is covered by Dibër prefecture.
3.8. Time coverage	CPI for Albania is available since 1993 and HICP for Albania is available since January 2016.
3.9. Base period	The reference period for CPI and HICP is December 2015 (December 2015=100).
4. Unit of measure	<p>Following indicators are used:</p> <ul style="list-style-type: none"> • Index (Index is the ratio of the price of good and service in a given year to prices in the base year and it is expressed in percentage. HICP can be thought of as the amount that the average consumer would have to spend in a given year to buy the same basic goods and services that one would have to pay 100 monetary units for in the base period.), • Percentage change on the same period of the previous year (Annual rates), • Percentage change on the previous month (Monthly rates), • Percentage share of the total (Weights).
5. Reference period	The reference period for CPI/HICP is month.
6. Institutional mandate	
6.1. Legal acts and other agreements	<p>CPI and HICP are calculated based on:</p> <ul style="list-style-type: none"> • Council Regulation (EC) No 2494/95 of 23, • Statistical Law of Albania: Law No. 9180, date 5.2.2004 “On Official Statistics”, • Official Statistics National Program 2017-2021. <p>Harmonised Indices of Consumer Prices are harmonised inflation figures required under the Treaty on the Functioning of the European Union. Council Regulation (EC) No 2494/95 of 23 October 1995 (OJ L 257/1) sets the legal basis for establishing a harmonised methodology for the compilation of the HICPs, the MUICP and the EICP. Under this Regulation, the Commission has brought forward detailed Regulations establishing the specific rules governing the production of harmonised indices. All recommendations and regulations can be found here: http://ec.europa.eu/eurostat/web/hicp/legislation</p> <p>CPIs despite methodological changes used by countries, they are official measure of inflation and they are used for internal usage. CPI in Albania is calculated based considerable number of HICP regulations, thus ensuring a high compatibility between indices.</p>
6.2. Data sharing	CPI data are sent to EUROSTAT every year.

7. Confidentiality	
7.1. Confidentiality - policy	<p>Data collected from the stores are considered strictly confidential and are used only for statistical and research purposes based on national Statistical Law No.9180 “On Official Statistics”, date 05.02.2004, as amended, and on Law No.9887, date 10.03.2008 “Personal Data Protection”. Article 15 on Statistics Law reads as follows: Data collected for the production of official statistics shall be treated by INSTAT as confidential and shall be used only in aggregated tables that will not identify the source information unit.</p> <p>Direct identification means when a statistical unit is directly identified from its name or address or any officially allocated and commonly known identification number. When data processing is made in a manner that allows the identification of the data subject, the data should immediately be encrypted in order for the subjects to be no longer identifiable</p>
7.2. Confidentiality - data treatment	CPI/HICP data is represented in index or percentage from (rates) and is therefore not treated for confidentiality.
8. Release policy	
8.1. Release calendar	<p>CPI is published in accordance with the release calendar on or around 8th of each month (T+8 days). HICP will be published in accordance with the release calendar on or around 22th of each month (T+22 days). The users are informed about any delay on publication through the publication calendar where it is specified the new date of release and the reasons of not being published on time.</p>
8.2. Release calendar access	<p>Access to the release calendar is granted through the following link: http://www.instat.gov.al/en/publications/publication-calendar,-2017.aspx</p>
8.3. User access	<p>In line with the article 17 of Law No.9180 “On Official Statistics”, dated in 05.02.2004, as amended, the INSTAT disseminates statistics on INSTSAT website and other media for simultaneous access, respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably.</p> <p>The following dissemination channels are used to release the results of CPI/HICP:</p> <ul style="list-style-type: none"> • Website – online release, • Written requests, • Special publications (General printed publications, Statistical yearbook), • Data request, session available for external users in the link below http://www.instat.gov.al/en/about-us/data-request.aspx
9. Frequency of dissemination	
	CPI and HICP are produced on monthly basis.
10. Accessibility and clarity	
10.1. News release	CPI/ HICP news release gives information for monthly changes in prices. The format of news releases has not changed and the template was prepared from dissemination sector, which detects also the publication date. The CPI/HICP news releases are published online in INSTAT web page.

10.2. Publications	<p>All data are published in INSTAT website:</p> <ul style="list-style-type: none"> • Prices: http://www.instat.gov.al/en/themes/prices.aspx • Books: http://www.instat.gov.al/en/publications/books.aspx
10.3. On-line database	<p>The database can be accessed in the following link: http://databaza.instat.gov.al/pxweb/en/DST Prices</p>
10.4. Micro – data access	<p>CPI/HICP data are not available in micro data level, as a consequence of preserving confidentiality.</p>
10.5. Other	<p>Users can submit specific requests for data through the INSTAT website in a dedicated session to contact in the following link: http://www.instat.gov.al/en/about-us/contact-us.aspx</p>
10.6. Documentation on methodology	<p>A short description on methodology used to compile CPI and HICP is published on INSTAT website: http://www.instat.gov.al/en/themes/prices.aspx?tab=tabs-2</p>
10.7. Quality documentation	<p>For internal users, Price Unit documents all processes and procedures used to calculate CPI/HICP.</p>
11. Quality management	
11.1. Quality assurance	<p>INSTAT is committed to ensure the highest quality with respect to the compilation of statistical information. In accordance with the Statistics Law No.9180, date 05.02.2014, INSTAT uses statistical methods and processes in compliance with internationally recognized scientific principles and standards and it conducts ongoing analyses of the statistics to improve their quality and ensure that statistics are up-to-date. In performing its tasks, it follows the general principles of quality management from the European Statistics Code of Practice. INSTAT declares that it relies on the following principles: impartiality, quality of processes and statistical products, user oriented, employee oriented, effectiveness of statistical processes, reducing respondent burden.</p> <p>Collected data are compared in terms of internal coherence, thus ensuring quality of the final product.</p>
11.2. Quality assessments	<p>CPI and HICP are the best indicators to measure inflation in Albania (CPI) and to compare inflation across countries in European Union (HICP).</p> <p>The Prices Unit checks prices every month. If we notice that a price has a big difference compared to the previous month, the interviewer is contacted to confirm this change and if it is well justified, this price is included in further calculations. Else, the interviewer should verify once more the collected price.</p> <p>In the reporting format used to collect prices, a logical control is implemented to signalize prices which have a monthly change of + or – 25%. In this reporting format, there is also an explanatory code for different types of big changes on prices.</p>
12. Relevance	
12.1. User needs	<p>Users of ICP/HICP are classified as external and internal.</p> <p>External users are:</p> <ul style="list-style-type: none"> • Institutions of public administration, • Universities, • National and international NGOs,

	<ul style="list-style-type: none"> • Private businesses, • Researchers, students and other similar groups. <p>Publication of the results of CPI is sent to specific groups of users.</p> <p>Internal users are those within INSTAT, who use CPI and HICP results as input for their work. These users are:</p> <ul style="list-style-type: none"> • National Account Directory, • Short Term Statistics.
12.2. User satisfaction	<p>Actually there is not yet an indicator to measure user satisfaction for published results from INSTAT.</p> <p>Page Views (Hits) for CPI in 2016 are about 9,862 clicks.</p> <p>Page Views (Hits) for CPI in 2015 are about 9,864 clicks.</p>
12.3. Completeness	<p>Completeness degree of CPI for 2016 is 100%. This calculation took into account the requirements of “Commission Regulation (EC) 1749/99, 23 July 1999”.</p>
13. Accuracy and reliability	
13.1. Overall accuracy	<p>The accuracy of CPI/HICP is generally considered to be high. There is methodological accuracy in regards of weights and prices and calculations according to European Regulations. The products in the basket are selected using HBS data. The goods and services selected are those of most importance to the customers, have a significant share in total consumption and best reflect the changes of prices of related products.</p> <p>Prices are collected in different type of outlets, supermarkets, markets, etc., in 11 prefectures in the country, some of them also via internet and by phone. For the calculation of weights for CPI, are used expenditures of resident households (national concept), and for HICP expenditures of resident and non resident households in Albania (domestic concept).</p>
13.2. Sampling error	<p>The methodology for calculating the precision of CPI/HICP is not applicable, because CPI/HICP is based in non-probability sample. To reduce errors we have increased the number of observations for each product.</p>
13.3. Non - sampling error	<p>Non response in observation level is calculated using retail outlets that refuse to give information and enumerators who do not find the required product in the outlet.</p> <p>The non response rate in observation level for CPI is 0%.</p> <p>The non response rate in variable level for CPI, for price of imputed rent is 0.3%.</p>
14. Timeliness and punctuality	
14.1. Timeliness	<p>CPI is published in accordance with the release calendar on or around 8th of each month.</p> <p>HICP will be published in accordance with the release calendar on or around 22th of each month.</p>
14.2. Punctuality	<p>The indicators are always published in time (100%) according with the calendar published by INSTAT at the end of each year.</p>

15. Coherence and comparability	
15.1. Comparability - geographical	<p>CPI and HICP are based on a harmonised methodology and they reflect the changes in prices and the differences in the population's consumption in the country.</p> <p>CPI data are comparable between prefectures because the method used for collecting, processing and calculating is the same in all the territory of Albania. All prefectures are covered to the same extent. Also the inflation in country level depends on relative size (in total expenditure terms) of each prefecture.</p> <p>To compare inflation with EU countries are used data given by HICP.</p>
15.2. Comparability - over time	<p>CPI/HICP data are fully comparable over time. There have been several improvements in methodology since HICP was introduced with the aim of improving reliability and comparability of HICP.</p> <p>However, previous indices are recalculated based on the latest methodology so they can be comparable over time.</p>
15.3. Coherence - cross domain	<p>CPI and HICP are two separated indicators to measure inflation. Their main difference is the weight concept. HICP is based on each monetary unit (ALL) spent in the territory of Albania, from Albanians and non Albanians. CPI is based on each monetary unit (ALL) spent by Albanians inside and outside the territory of Albania. Other changes are:</p> <p>CPI:</p> <ul style="list-style-type: none"> • Weights of goods and services are calculated based on HBS data, • Weights are expressed in percentage, • Monitored by INSTAT. <p>HICP:</p> <ul style="list-style-type: none"> • Weights of goods and services are calculated based on National Accounts data, • Weights are expressed in per thousand, • Monitored by EUROSTAT, • Imputed rent is excluded.
15.4. Coherence - internal	<p>CPI and HICP are derived from well-defined procedures which controls internal coherence of collected data.</p>
16. Cost and burden	<p>Persons working for CPI/HICP:</p> <ul style="list-style-type: none"> • Total Staff in Central Office: 3 employees, • Regional Office Staff: 10 employees, • Interviewers: 12 employees.
17. Data revision	
17.1. Data revision - policy	<p>Revision policy of CPI/HICP is done in accordance with general revision policy and errors treatment policy introduced by INSTAT in the links below:</p> <p>http://www.instat.gov.al/media/371722/revision_policy_2016.pdf</p> <p>http://www.instat.gov.al/media/371809/the_errors_treatment_policy.pdf</p>
17.2. Data revision - practise	<p>In CPI revisions are done in 2002, 2003 and 2004 because of changes in the methodology of calculation of imputed rents.</p>

18. Statistical processing

18.1. Source data	<p>Product selection is carried out by INSTAT, using the results of HBS 2015. While selection of outlets and products for each outlet is done from INSTAT with collaboration of Regional Statistical Offices. Main sources for calculation of the weights for CPI are HBS data and for HICP National Accounts data. In 2016 the baskets have 333 products in CPI and 332 products in HICP. On average during the month we collect about 22.973 individual prices in about 3.500 outlets.</p> <p>Number of representative items at the lowest classification level: All-items: CPI 333 (HICP 332) 01 Food and non-alcoholic beverages 101 02 Alcoholic beverages, tobacco 6 03 Clothing and footwear 40 04 Housing, water, electricity, gas and other fuels 13(12) 05 Furnishings, household equipment and routine maintenance of the House 42 06 Health 12 07 Transport 20 08 Communications 8 09 Recreation and culture 36 10 Education 7 11 Restaurants and hotels 19 12 Miscellaneous goods and services 27</p> <p>Average number of price observations per month: 22.973 01 Food and non-alcoholic beverages: 7.702 02 Alcoholic beverages, tobacco : 443 03 Clothing and footwear : 2.794 04 Housing, water, electricity, gas and other fuels 621 05 Furnishings, household equipment and routine maintenance of the House 2.801 06 Health 781 07 Transport 1.177 08 Communications 513 09 Recreation and culture 2.241 10 Education 307 11 Restaurants and hotels 1.457 12 Miscellaneous goods and services 2.134</p>
18.2. Frequency of data collection	<p>Prices of most goods and services are collected each month between the 10th and 25th of the month by full-time price collectors employed by INSTAT. However, in the case of fresh vegetables and fruits price collection is done 2-3 times a month, and average price is used for calculation. Air-fair tickets and sea-fair tickets are collected in two months in advanced. Prices for some products such as; university tariffs, price of school books, dormitory tariffs are collected one time in the year.</p>
18.3. Data collection	<p>Outlet selection Data are collected from the most representative retail outlets in country. In the absence of a real register of outlets, the selection of them is done on the basis of the knowledge of price collection and regional statistical specialist, based on instructions prepared for this aim from staff of Price Unit at INSTAT. The main criteria for selection of outlets in each locality are the coverage of the available</p>

	<p>shopping areas within each location and the representation of different types of outlets.</p> <p>Three criteria are used in the outlet selection process:</p> <ul style="list-style-type: none"> • Popularity with buyers • Turnover • The availability of goods and services included in basket of CPI/HICP <p>Selection criteria are object of updating.</p> <p>Once a year, usually in November and December, the sample of outlets is reviewed and updated. The sample covers different types of outlets from market stalls, specialised shops, big shopping centres, restaurants and hotels as well as internet shops and catalogues in both centre and suburb of the country.</p> <p>Techniques of products selection and specification</p> <p>The representative products to be priced are selected judgmentally at the end of every year by central price statistics staff and specialists of regional statistics, who also determine their specifications.</p> <p>These products are selected on the basis of information obtained from:</p> <ul style="list-style-type: none"> • HBS data, • Retail trade statistics, • Price collectors' suggestions, • Producer's information, • Other sources. <p>The specifications for individual good/service are more or less detailed; indicating size, unit, materials, brand, and characteristics. The specification will depend also on the nature of the product. If a product has many characteristics which could have effect on its price, then the specification is more exact.</p>
18.4. Data validation	<p>Data validation is done by INSTAT. All collected prices are reviewed by price collectors before being entered into the computer; the second phase of control is incorporated in the computer program for data entry and in the end all data are manually checked by a regional staff. If there are doubts about the reliability of one or several prices, these prices are checked once again by contacting price collectors or, if necessary, checked directly in the field. There is no automatic rejection of observed prices in our validation process. Each case (problematic price) is considered individually and all modifications are done on the basis of relevant information.</p>
18.5. Data compilation	<p>Weights for CPI</p> <p>The Final Monetary Consumption Expenditures are used for calculation of CPI weights. The main sources of final expenditures are HBS data. CPI in year t is based in expenditures of year t-1.</p> <p>Additional sources for calculation of weights for imputed rents, alcoholic beverages and tobacco are National Accounts data.</p> <p>The item weights are expressed as a share of total expenditure on all goods and services falling within the scope of the index. Weights are updated every year based on HBS data and other sources.</p> <p>Weights for HICP</p> <p>HICP weights are calculated in accordance with the requirements of Commission Regulation (EC) No 2454/97 and Council Regulation (EC) No 1688/98. The HICP weights reflect the structure of the FMCE (domestic concept).</p>

	<p>National accounts are the main source of data for construction of the HICP weights at the highest levels of aggregation. HICP in year t is calculated with weights of year t-2.</p> <p>Calculation of the index in detailed level Elementary indices are calculated using un-weighted geometric mean of collected prices for each product.</p> <p>Calculation of the index in aggregate level and total index Aggregated index and total index are calculated using Laspeyres formula. The relative prices are aggregated geographically to form product indices on items for whole Albania. Aggregation over items then gives the CPI of Albania.</p> <p>Treatment of missing items and replacements When a non-seasonal item is temporarily missing in a given outlet, the last recorded price is retained for one month to two months, but usually at the same time the price for its substitute is observed. When it is clear that a non-seasonal item is missing permanently (in the third month or earlier), the item is substituted with the most comparable one in the same outlet or its price is extrapolated by price change of the same or similar item in another outlet(s).</p> <p>Introduction of newly significant goods and services In December of each year updating of goods and services of basket is performed, including new products considered as representative during previews year.</p> <p>Treatment of price reductions Seasonal sales, other sales prices and reduced prices (e.g. special offers, discounts, etc.) are included in the index when they are available to all potential consumers.</p> <p>Treatment of seasonal products Seasonal products are treated based on the Commission Regulation (EC) No 330/2009 of 22 April 2009. Seasonal products during the year are treated with fix weights; it means that the yearly indices of seasonal products are calculated with fix weights. All-seasonal estimation is used. Estimation is carried out in the following way:</p> <ul style="list-style-type: none"> • In the first month of the out-of-season period, the monthly typical price is calculated as average prices for months, • From the second month of the out-of-season period, the estimated monthly price is applied for each product which is out-of-season. To obtain the price ratio for estimation, only prices for products available in the current and previous months are used.
18.6. Adjustment	<p>Adjustments for quality change: When the CPI/HICP is calculated, it is important that the products are priced without any change in quality, because only 'pure' price changes, not any due to changes in the quality of the products observed, should be reflected. The most commonly used methods of dealing with changes in product quality are:</p> <ul style="list-style-type: none"> • Package-size adjustment: The value of a change in package size, as a proportion of the price, is assessed as the relative change in package-size • Annual overlap: For many products new samples are selected each year during the annual revision of the consumer basket. December is taken as the

	<p>link month when prices are collected for both the old and new samples. Quality differences between these two samples are then eliminated by the 'annual overlap' method.</p> <ul style="list-style-type: none"> • Direct comparison: Price collectors are instructed to measure the price for the same variety throughout the year. If the variety disappears permanently from the market, they should choose another with the most similar quality. In these cases, direct comparison is applied because the difference in quality between the old and new varieties is minor. • Supported judgment: Means that the value of the quality change between a replaced and replacement product-offer is calculated by using supplementary information sources. <p>Central office staff deals with quality adjustments. In regional level, interviewers cannot make adjustments; they are only instructed to report in central office for any considerable change on quality of the substituting product. No seasonal adjustment is performed.</p>
19. Comment	
Annex	